WHAT IS CLAIMED IS:

- X. A disk drive odometer substantially as shown and described.
- 2. A data storage device comprising:
- a mass storage device;
- a circuit associated with said mass storage which generates data representative of data inputs and outputs of said mass storage device.
- 3. A data storage device as in claim 1, wherein said mass storage device is portable and said circuit is physically attached to said mass storage device for being portable therewith.
- 4. A data storage device as in claim 3, wherein said mass storage device is a hard disk drive.
- 5. A data storage device as in claim 1, wherein said circuit comprises a counter which indicates a cumulative quantity of data input to and output from said mass storage device.
- 6. A data storage device as in claim 5, wherein in response to said data inputs and outputs, said counter automatically increments.
- 7. A data storage device as in claim 6, wherein said counter does not decrement or reset in response to said data inputs and outputs.
- 8. A method of providing a mass storage device with improved data security, substantially as shown and described.

- A method of detecting unauthorized accesses to a mass storage device, substantially as shown and described.
- 10. A method of measuring data transfer on a mass storage device, comprising the steps of:

reading information indicating a first amount of data that has been written to and read from said mass storage device as of a first point in time;

reading information indicating a second amount of data that has been written to and read from said mass storage device as of a second point in time;

determining whether there is a difference between said first and second amounts, and if so, comparing said difference to an authorized difference so as to determine whether such difference is authorized or unauthorized.

11. A method as in claim 10, wherein said second amount is generated by counting units of data that are read from or written to said mass storage device after said first point in time.